

Please amend the above-identified application as follows:

**Amendments to the Specification:**

On page 23, first full paragraph, lines 12-16, replace the first full paragraph to correct the following typographical error: "such a as mixed micelles"

Mixed micelles containing mixtures of detergent molecules readily form because the driving force for association of amphipathic molecules into micelles is nonspecific and because the resultant micelle has a liquid like core. As used herein "mixed micelles" refers to micelles containing mixtures of different detergent molecules, ~~such a mixed~~ such as mixed micelles of Zw 3-12 and TX-100.

On page 35, please replace Table 1 to add the units of "sec" as shown:

**Table 1. Pain Responses in Seconds to Injection of 0.1 ml Injection of Various Immunogenic Compositions.**

Immunogenic Composition	<u>Time pain response (sec)</u>					
	0-10 min.		10-20 min.		20-30 min.	
	Median	Mean (range)	Median	Mean (range)	Median	Mean (range)
PBS	11	16 (0-43)	7	16 (0-44)	0	11 (0-64)
PBS + 0.05% Zw 3-14	2	36 (0-144)	19	30 (0-86)	1	16 (0-77)
PFP2 + QS-21	20	41 (0-103)	7	19 (0-62)	27	33 (0-74)
GC rPorB in PBS + 0.05% Zw 3-14	47	46 (7-89)	34	37 (2-81)	18	16 (0-34)
NTHi/Mcat	0	2 (0-7)	0	3 (0-15)	0	4 (0-21)
5% Formalin	311	274 (78-381)	292	312 (171-461)	448	450 (376-548)

On page 38-39, please replace Table 3 to add the units of "sec" as shown on the next page:

**Table 3. Effect of Injection Volume on Pain Responses in Seconds.**

			Time pain response (sec)					
Immunogenic Composition	Vol. inject (ml)	N	0-10 min		10-20 min.		20-30 min.	
			Median	Mean (Range)	Median	Mean (Range)	Median	Mean (Range)
PBS	0.1	4	1	2 (0-5)	1	1 (0-4)	1	1 (0-2)
PBS + 0.05% Zw 3-14 (1x)	0.1	4	9	9 (2-14)	2	6 (0-20)	5	5 (0-9)
PBS + 0.005% Zw 3-14 (0.1x)	0.1	4	0	0 (0-1)	1	6 (0-24)	0	0 (0-0)
0.1x GC rPorB in PBS + 0.05% Zw 3-14 (1x)	0.1	4	0	13 (0-52)	0	4 (0-15)	0	4 (0-14)
1x GC rPorB in PBS + 0.05% Zw 3-14 (1x)	0.1	4	3	10 (0-34)	2	18 (0-66)	3	9 (0-31)
0.1x GC rPorB in PBS + 0.005% Zw 3-14 (0.1x)	0.1	4	0	1 (0-2)	2	3 (0-7)	0	1 (0-2)
PBS	0.2	6	0	2 (0-7)	3	4 (0-15)	1	8 (0-38)
PBS + 0.05% Zw 3-14 (1x)	0.2	6	43	62 (3-197)	52	46 (0-103)	33	31 (0-51)
PBS + 0.005% Zw 3-14 (0.1x)	0.2	4	5	13 (0-41)	15	25 (0-70)	5	5 (2-8)
0.1x GC rPorB in PBS + 0.05% Zw 3-14 (1x)	0.2	4	61	62 (18-107)	19	23 (2-52)	6	10 (1-27)
1x GC rPorB in PBS + 0.05% Zw 3-14 (1x)	0.2	6	66	88 (19-213)	82	85 (30-156)	4	12 (0-54)
0.1x GC rPorB in PBS + 0.005% Zw 3-14 (0.1x)	0.2	4	22	21 (0-38)	19	28 (12-60)	3	8 (0-27)

On page 42, please replace Table 5 to add the units of "sec" as shown:

**Table 5. Pain Responses Injection of 0.2 ml of PFP-2 + QS-21.**

Immunogenic Composition	0-10 min. time pain response sec			10-20 min. time pain response sec		
	N	Median	Mean (Range)	N	Median	Mean (Range)
PBS	8	0	1 (0-6)	7	0	0 (0-0)*
PFP-2 + QS-21	8	23	41 (5-117)	8	0	10 (0-40)
GC rPorB in PBS + 0.05% Zw 3-14	8	53	56 (5-112)	8	4	3 (0-11)

On page 44, please replace Table 7 to add the units of "sec" as shown:

**Table 7. Effect of Different Zwittergent 3-14 or GC rPorB Concentrations on Pain Responses.**

Immunogenic Composition	0-10 min. time pain response sec		10-20 min. time pain response sec	
	Median	Mean (Range)	Median	Mean (Range)
PBS	0	1 (0-5)	0	1 (0-6)
PBS + 0.05% Zw 3-14 (1x)	18	18 (3-34)	13	21 (0-84)
PBS + 0.005% Zw 3-14 (0.1x)	0	0 (0-1)	0	2 (0-9)
10 µg/ml GC rPorB (0.1x) + 0.05% Zw 3-14 (1x)	18	30 (0-143)	23	28 (0-92)
10 µg/ml GC rPorB (0.1x) + 0.005% Zw 3-14 (0.1x)	11	10 (0-26)	0	7 (0-47)
100 µg/ml GC rPorB (1x) + 0.05% Zw 3-14 (1x)	66	110 (0-279)	49	79 (0-315)
100 µg/ml GC rPorB (1x) + 0.005% Zw 3-14 (0.1x)	1	13 (0-52)	0	9 (0-25)
NTHi/Mcat.	0	2 (0-13)	9	14 (0-46)
5% Formalin	162	178 (20-331)	173	174 (54-279)

On page 47, please replace Table 9 to add the units of "sec" as shown:

**Table 9. Effect of Triton X-100 on Pain Responses Induced by GC rPorB**

<u>Immunogenic Composition</u>	0-10 min.		10-20 min.	
	<u>time pain response</u>		<u>time pain response</u>	
	<u>sec</u>		<u>sec</u>	
	Median	Mean (Range)	Median	Mean (Range)
PBS	0	5 (0-37)	0	6 (0-45)
PBS + 0.06% TX	2	8 (0-34)	0	2 (0-15)
GC rPorB in PBS + 0.05% Zw 3-14	168	164 (26-300)	197	232 (0-600)
<u>GC RPORB IN PBS + 0.06% TX (EXCHANGED FROM ZW 3-14)</u>	0	8 (0-58)	0	2 (0-13)
<u>NTHI/MCAT</u>	0	2 (0-11)	0	0 (0-1)
NTHi/Mcat + Al gel	11	36 (0-191)	25	45 (0-131)

On page 49, please replace Table 11 to add the units of "sec" as shown:

**Table 11. Effect of diluting GC rPorB/Zw 3-14 into Triton X-100 Buffer.**

<u>Immunogenic Composition</u>	0-10 min.		10-20 min.	
	<u>time pain response</u>		<u>time pain response</u>	
	<u>sec</u>		<u>sec</u>	
	Median	Mean (Range)	Median	Mean (Range)
PBS	0	1 (0-5)	0	0 (0-2)
PBS + 0.05% TX	0	3 (0-16)	0	0 (0-0)
PBS + 0.05% Zw 3-14 diluted into PBS + 0.05% TX	0	2 (0-13)	0	3 (0-21)
GC rPorB in 0.05% Zw 3-14	64	102 (0-263)	45	47 (0-126)
GC rPorB in 0.05% Zw 3-14 diluted into PBS + 0.05% TX	0	0 (0-0)	0	1 (0-10)
GC rPorB in 0.06% TX (exchanged from Zw 3-14)	1	9 (0-48)	0	0 (0-0)
5% Formalin	219	225 (51-366)	181	167 (4-310)

On page 51, please replace Table 13 to add the units of "sec" as shown:

**Table 13. Pain Responses to 0.2 ml injections of GC rPorB Formulated in Tris Buffered Saline Containing Triton X-100 or Reduced Triton X-100.**

Immunogenic Composition	0-10 min		10-20 min.	
	time pain response		time pain response	
	sec		sec	
	Median	Mean (Range)	Median	Mean (Range)
TBS	0	4 (0-25)	0	4 (0-17)
GC rPorB in PBS + 0.05% Zw 3-14	53	83 (0-206)	20	30 (0-126)
GC rPorB in PBS + 0.05% Zw 3-14 diluted into PBS + 0.05% TX	0	10 (0-35)	6	16 (0-85)
GC rPorB in PBS + 0.05% Zw 3-14 diluted into PBS + 0.05% red. TX	0	8 (0-61)	0	6 (0-34)
PBS + 0.05% Zw 3-14 diluted into TBS + 0.05% TX	12	17 (0-50)	1	6 (0-44)
PBS + 0.05% Zw 3-14 diluted into TBS + 0.05% red. TX	0	4 (0-32)	1	3 (0-12)
5% Formalin	233	252 (97-457)	448	435 (303-523)

On page 54, please replace Table 16 to delete "(cont.)" in the title as shown:

**Table 16. Survey of Pain Induced by Various Detergents in Rat Footpad Model** ~~(cont.)~~

Detergent*	Concentration	Mean time pain response (sec.)		Standard deviation	
		0-10 min.	10-20 min.	0-10 min.	10-20 min.
Octyl glucoside (NI)	1%	48	108	54	72
CHAPS (ZW)	0.9%	351	114	158	129
PBS		3	0.4	8	1
Tween80 (NI)	0.025%	3	6	7	11
BRIJ35 (NI)	0.02%	1	0	3	1
Formalin	5%	114	218	93	110

\* NI - nonionic; ZW - zwitterionic,

On page 55, please replace Table 11 to delete "(cont.)" in the title as shown:

**Table 17. Survey of Pain Induced by Various Detergents in Rat Footpad Model (cont.)**

Detergent*	Concentration	Mean time pain response (sec.)		Standard deviation	
		0-10 min.	10-20 min.	0-10 min.	10-20 min.
Mega10 (NI)	7 mM	28.8	31.0	35.1	28.6
Dodecyl maltoside (NI)	0.8%	298.0	141.0	148.2	106.7
Emipgen BB (ZW)	0.09%	44.3	6.1	117.7	12.4
TBS	N/A	0.0	0.0	22.8	0.0
Sodium (I) deoxycholate	0.5%	307.0	121.9	170.0	112.6
Zwitt 3-10 (ZW)	0.8%	300.6	260.5	125.0	160.7
Formalin	5%	272.5	280.4	81.2	58.5

\* NI - nonionic; ZW - zwitterionic, I - ionic